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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,601

04/12/2006

Michael Breuer

HM-713PCT

1627

40570 7590 06/16/2008
FRIEDRICH KUEFFNER
317 MADISON AVENUE, SUITE 910
NEW YORK, NY 10017

EXAMINER

SUHOL, DMITRY

ART UNIT

PAPER NUMBER

3725

MAIL DATE

DELIVERY MODE

06/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/575,601	Applicant(s) BREUER ET AL.	
	Examiner Dmitry Suhol	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-4, 6-8 rejected under 35 U.S.C. 103(a) as being unpatentable over Kramer (EP 0781609) in view of Konose et al (JP 05-161902) and Langer et al '191. Kramer discloses a mill set up including at least one stand in a reversible roughing train (1), at least one stand in a finishing train (3), an upstream and down stream coiler (5, 6) such that the distance between the roughing train and the finishing train allows the two to act in simultaneous tandem operation (figure 2) (see English equivalent US20030051525 including abstract).

Konose is relied upon to teach the use of reversible tandem 2-high roughing stands in a hot mill operation for the purpose of improving temperature profile of the metal material. Therefore it would have been obvious to one having ordinary skill in the art, at the time of the claimed invention, to have provided the roughing stands of Kramer as 2-high tandem type in order to better control the temperature profile of the metal strip.

Langer is relied upon to teach that it is known and advantageous utilize reversible tandem finishing stands (4) in a hot rolling operation (figures 1-2) for the

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purpose of minimizing the length of the mill and controlling the temperature of the metal strip. Therefore it would have been obvious to utilize the reversible tandem set up of the finishing stands as taught by Langer in the set up of Kramer for the purpose of shortening the mill length while at the same time controlling the temperature of the strip metal being rolled.

Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kramer (EP 0781609), Konose et al (JP 05-161902) and Langer et al '191, as stated above, and further in view of Ginsburg '490. Kramer, as modified by Konose and Langer discloses most of the claimed limitations including a shear (4). The references fail teach that shear (4) is a flying type shear, a furnace unit, a cropping shear and an edging stand as required. However the use of a flying type shear for shear (4) of Kramer would have been obvious since the examiner takes official notice that such shears are well known to be utilized and the use of such would depend on the cost and productivity desired in the mill.

Ginsburg is relied upon to teach that it is known to provide complete installations such as that of Kramer with a cropping shear (3) for cutting the strip into desired slabs, a furnace (5) for heating the strip to the desired workable temperature and an edging stand (10) for cutting the edges and ends of the work material (figure 3). Therefore it would have been obvious to include a cropping shear for cutting the strip into desired slabs, a furnace for heating the strip to the desired workable temperature and an edging

stand for cutting the edges and ends of the work material in the mill in Kramer for the reasons stated.

With respect to claim 9, the method steps would have been obvious in lieu of the above references, for example, the conveyance of the hot initial product into the mill is inherent in Kramer, reverse roughing of the product is taught by Kramer (see English equivalent US20030051525 including abstract, especially paragraph 0019), initial cropping is taught by Ginsburg and use of shear (3) in order to cut the material to length, while the reverse rolling of in the finishing train including coiling and uncoiling is taught by Langer for the purpose of providing the material with the desired finished thickness while being held the desired working temperature.

Response to Arguments

Applicant's arguments filed 11/8/2007 have been fully considered but they are not persuasive. Applicants again argue that Kramer only teaches the use of a single roughing stand and a single finishing stand. In response the examiner again directs applicants attention to the abstract of the English equivalent which envisions "at least one" stand for the roughing and finishing trains, thereby encompassing more than one stand.

Applicants further argue that Konose does not teach a tandem operation of a roughing and finishing stand. In response it is again pointed out that such an operation is already taught in the primary reference of Kramer, while Konose is merely relied upon

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to teach the use of reversible tandem 2-high roughing stands in a hot mill operation for the purpose of improving temperature profile of the metal material.

Applicants further argue that it is impossible to reverse the roll strip in the Langer roughing stand. In response the examiner points out that Langer is only relied upon to teach that it is known and advantageous utilize reversible tandem finishing stands (4) in a hot rolling operation (figures 1-2) for the purpose of minimizing the length of the mill and controlling the temperature of the metal strip. The reverse rolling in tandem roughing stand is already disclosed in the primary reference of Kramer.

Lacking any clear distinguishing features, the train of Kramer is capable of rolling aluminum metal and the use of such would have been obvious as it would only depend on the desired product and since it is notoriously well know to roll such products in metals mills as attested to by the applicants in their Prior Art figure 3.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Suhol whose telephone number is 571-272-4430. The examiner can normally be reached on Mon - Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dmitry Suhol/
Primary Examiner, Art Unit 3725

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